Risk realities and risk perception

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Risk Communication: A Definition

Actions, words, and other messages, responsive to the concerns and values of the information recipients, intended to help people make more informed decisions about threats to their health and safety.

Less Effective Risk Communication

Telling people only what you want them to know, to get them to behave the way you want them to behave.

Risk Communication is NOT...

...only a way to get people to calm down.

It is also sometimes a way to get them to “calm up”.
Risk Communication will be less effective if...

...it refuses to accept the intuitive reasoning people use to gauge risk.

...it is a monologue instead of a dialogue.

...it is thought of only as PR and not also Policy...merely what you say, not also what you do and how you ACT.

The Need for More Effective Risk Communication

1. The Perception Gap can lead to real harms.
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1. The Perception Gap can lead to real harms.

2. The risks that arise from people’s perceptions MUST be included in risk management policy making.

3. Risk communication is a risk management tool for advancing your agenda AND improving public health and safety.
Risk communication will be more effective by adding to what people know, and creating new synapses that represent an enhanced view of how people can protect themselves...

...than by trying to talk people out of what they already know and feel, trying to disconnect the synapses that represent how they’ve learned to protect themselves.

"By the animal instinct that is awakened in us we are led and protected. It is not conscious; it is far quicker, much more sure, less fallible, than consciousness."

Erich Maria Remarque
Bounded Rationality

When we don’t have all the time, all the information, or all the “smarts” we need to make a completely rational decision.

THE ADAPTIVE TOOLBOX
MENTAL SHORTCUTS IN DECISION MAKING

- Optimism
- Framing
- Representativeness
- Anchoring
- Loss Aversion

1. TRUST

- The more we trust, the less afraid we will be.
- The less we trust, the more afraid we will be.

(More Afraid)
- Anything connected with industry
- Communications from politicians
- A decision making process that’s closed

(Less Afraid)
- Anything connected with consumer groups
- Communications from neutral experts (doctors, academics)
- A decision making process that’s open
1. TRUST
- In the communicator
- In the organization that’s supposed to protect you
- In the organization creating the risk
- In the process

2. HARM v. BENEFIT
- Vaccinations
- Medical X rays
- Prescription drugs

3. CONTROL
   (ability to influence events as they occur)
   (More Afraid)
   - Flying
   - Riding as a passenger in the front seat of a motor vehicle
   - A process in which you can NOT participate
   (Less Afraid)
   - Riding a bicycle
   - Driving a motor vehicle
   - A process in which you CAN participate

4. CHOICE
   (is the risk voluntary or imposed)
   (More Afraid)
   - Food with a harmful ingredient NOT listed on the label
   - The government chooses your town for a nuclear waste repository
   (Less Afraid)
   - Food with a harmful ingredient that IS listed on the label
   - INVITING the government to locate the nuclear waste repository in your town
5. NATURAL v. HUMAN-MADE

(More Afraid)
- Industrial chemicals
- Technologies (GM food, nuclear power)

(Less Afraid)
- Organic food
- Herbal remedies

6. DREAD

(More Afraid)
- Anything associated with radiation (cancer)
- Pesticides (cancer)
- Plane Crash

(Less Afraid)
- Heart disease (leading cause of death in the U.S.)
- Flu
- Food poisoning

7. CATASTROPHIC or CHRONIC

(More Afraid)
- Terrorism
- Plane crashes

(Less Afraid)
- Heart disease
- Stroke
- Motor vehicle crashes
8. UNCERTAINTY
(When we don’t have all the answers, or we have them but don’t understand them.)

(More Afraid)
- New technologies
- Terrorism
- Radiation, chemicals, complex technologies/issues
- Conflicting scientific studies (hormone repl. therapy)

(Less Afraid)
- Artificial sweeteners, microwave ovens, electrical & magnetic fields, silicone breast implants

9. ME OR THEM

- Terrorism to Americans in “The HoMEland” after September 11, 2001
- Radiation from power lines when such a line is installed near your home
- HIV/AIDS

10. FAMILIAR v. NEW

(More Afraid)
- West Nile Virus in year one.
- Terrorist attacks in America
- Avian influenza (H5N1)

(Less Afraid)
- West Nile Virus in year two, three....
- Terrorist attacks in Israel
- “Regular” influenza

11. CHILDREN

- Plastics in children’s toys
- Abduction
- Pollution problems in schools
12. PERSONIFICATION

- Fear of child abduction rises when there is a specific case in the news
- Fear of war rises after we see pictures of the dead and injured
- Concern about medical errors increases when we learn of a victim of a doctor’s mistake

13. FAIRNESS

(More Afraid)
- Risks to the sick, the elderly, the handicapped, the poor
- If you get none of the benefits, and all the risk

(Less Afraid)
- Risks to workers, the rich, the powerful
- If you enjoy some of the benefits along with the risk

14. AWARENESS

(More Afraid)
- Terrorism
- Avian flu

(Less Afraid)
- Heart disease
- Influenza
David Ropeik is an instructor in risk communication at Harvard School of Public Health in the Department of Environmental Health’s Exposure, Epidemiology, and Risk Program. He was a former director of risk communication for the Harvard Center for Risk Analysis. He has bachelor's and master's degrees in journalism from Northwestern University’s Medill School of Journalism. He was a Knight Science Journalism Fellow at MIT and a National Tropical Botanical Garden Fellow. He has taught journalism at Boston University and Tufts University. Ropeik co-wrote RISK, A Practical Guide for Deciding What’s Dangerous and What’s Safe in the World Around You published by Houghton Mifflin. He is a regular commentator on risk issues for National Public Radio. He has written op-ed pieces on risk and risk communication for The New York Times, The Washington Post, USA Today, Newsday, Parade Magazine, The Sacramento Bee, The Boston Globe, The Boston Herald, Congressional Quarterly, Post Graduate Medicine Magazine, and the quarterly magazine of the National Academy of Sciences. He has collaborated with many risk experts on a variety of articles on risk perception and risk communication. He has been widely cited on issues of risk perception in major national and international journals and news services, and interviewed on several regional, national and international television and radio programs. Ropeik has lectured and consulted widely on risk communication and risk perception. Prior to joining Harvard, Ropeik was a television reporter for WCVB-TV, Channel 5, in Boston for 22 years. He specialized in reporting on environment and science issues. He twice won the DuPont-Columbia Award, often cited as the television equivalent of the Pulitzer Prize. He also won a national Gabriel Award, National Headliners Award, and seven regional EMMY awards. He was for ten years a member of the board of directors of the Society of Environmental Journalists. Between 1998 and 2000 he authored a science column in The Boston Globe, syndicated by The New York Times. That column appeared on MSNBC.com from 2000-2002.